

**Division of Apprenticeship Standards (DAS)
Apprenticeship Program Summary Sheet**

To: Eric Rood, Chief
From: Paul Giacomotto
CC: Program Planning and Review
Date: August 28, 2023

Program Name: Enablence USA Components, Inc.
Industry: Advanced Manufacturing
DAS File No.: 101157
Grant Awardee: ☒ No ☐ Yes

Actions:

- ☒ Proposed new apprentice program
- ☐ Existing apprenticeship program adding new occupations
- ☐ Existing apprenticeship program expanding area of operations
- ☐ Existing apprenticeship program changing work processes on approved occupations.

Labor Organizations Representing Any of the Apprentices:

None

Request for Approval under Labor Code 3075:

Enablence USA Components, Inc. is not intended to train in the building and construction trades and is not eligible to dispatch apprentices to projects with public works, prevailing wage or skilled and trained workforce requirements within the meaning of Labor Code sections 1720 and 3075 and will not train or dispatch apprentices in the building and construction trades or firefighters occupations.

Comments:

The Enablence USA Components, Inc. Apprenticeship Program (Semiconductor / Nanotechnology Process Technician Occupation) is being developed to support the growth in an industry being positively influenced by the CHIPS and Science Act. Enablence designs and manufactures optical chips that are used by the world's leading transceiver companies with an operating location in Fremont, CA. Foothill Community College will provide the education training and support focused on Quantitative Reasoning, Introduction to Semiconductor Technology, and Industry Technologies for the Semiconductor/Nanotechnology Process Technician apprentices.

Enablence USA Components, Inc. will oversee the apprenticeship program herein and seeks approval from the Department of Industrial Relations, Division of Apprenticeship Standards for the following:

Proposed Occupation, Wage Rate & O*Net Code:

- Semiconductor Process Technician O*Net: 17-3026.00
Professional Worker Wage: \$25.00 per hour
Proposed Apprentice Wage: \$23.00 per hour
Proposed No. of Apprentices: 5

Proposed Employers:

- Enablence USA Components. Inc., 2933 Bayview Drive, Fremont, CA 94538

Enablence USA Components, Inc. Program Standards

Incorporating and Adopting

U.S. Department of Labor, Office of Apprenticeship Approved Standards

2933 Bayview Drive, Fremont, CA 94538

510-226-8900

amy.ma@enablence.com

Table of Contents

Program Standards.....	1-7
Approved DOL Standards	
Local Education Agency Letter(s).....	Attachment A
California Apprenticeship Agreement (DAS-1)	Attachment B

Article I Purpose and Policy – CA LC §3075, 3076, 3089; CCR §205, 206, 212.1, 212.2, 218

The parties hereto declare their purpose and policy to incorporate the attached standards approved by the U.S. Department of Labor Office of Apprenticeship to establish an organized, planned system of apprenticeship conducted as an education-sponsored, employer-based undertaking. All provisions in the U.S. Department of Labor Office of Apprenticeship attached hereto, that do not conflict with California laws and regulations shall be incorporated, adopted and agreed upon under the Shelley-Maloney Apprentice Labor Standards Act of 1939, as amended, to govern the employment and training of apprentices in the trade, craft or occupation defined herein, to become effective upon their approval under the California standards. In case of conflict of law, California Law shall prevail. No Section of these standards of apprenticeship shall be construed as permitting violation of any Federal Law or Regulations and the State of California Law or Regulations.

These standards shall apply to the employer signatory hereto and to all apprentice agreements hereunder.

Article II Craft, Trade, Occupation – CA LC §3078 (c); CCR §212 (a,1)

The approved occupations are set forth in the U.S. Department of Labor Office of Apprenticeship standards attached to this California State standard. Additional occupations may be added or deleted by the above-named master apprenticeship committee by first submitting the proposed change(s) to the U.S. Department of Labor Office of Apprenticeship. Once the U.S. Department of Labor Office of Apprenticeship approves the change, the revised standards may be submitted to the California Division of Apprenticeship Standards (DAS) for approval of the Administrator of Apprenticeship.

Article III Occupations – CA LC §3078.5

The occupational supplement(s) included in the attached U.S. Department of Labor Office of Apprenticeship standards set forth the terms of the occupation, ratio, work processes, and related supplemental instruction for each individual occupation.

Article IV Responsibilities of Program Sponsor – CA LC §3076, 3076.3; CCR §205, 206, 212, 212.3

The program sponsors are responsible for the administration and enforcement of all aspects of a Registered Apprenticeship program. Sponsor means any person, association, committee, or organization operating an apprenticeship program and in whose name the program is (or is to be) registered or approved.

Sponsors with multiple employers will establish an Apprenticeship Training Committee to fulfill the responsibilities and duties required of a Program Sponsor as described in the attached U.S. Department of Labor Office of Apprenticeship standards.

In addition, the Sponsor(s) agree to (1) supervise the administration and enforcement of these standards; (2) adopt such rules and regulations as are necessary to govern the program provided that the rules and regulations do not conflict with these standards and provide a copy of such to each apprentice; (3) conduct orientations, workshops or other educational sessions for employers to explain the apprenticeship program's standards and the operation of the apprenticeship program; (4) pass upon the qualification of employers and, when appropriate, to suspend or withdraw approval; (5) conduct on-going evaluation of the interest and capacity of employers to participate in the apprenticeship program and to train apprentices on the job; (6) determine the qualifications of apprentice applicants and ensure fair and impartial treatment of applicants for apprenticeship selected through uniform selection procedures; (7) file a signed copy, written or electronic, of each apprentice agreement with the Division of Apprenticeship Standards, within 30 days of execution, with copies to all parties to the agreement; (8) establish and utilize a procedure to record and maintain all records of the apprentice's worksite job progress and progress in related and supplemental instruction; (9) establish and utilize a system for the periodic review and evaluation of the apprentice's progress in job performance and related instruction; (10) discipline apprentices, up to and including termination, for failure to fulfill their obligations on-the-job or in related instruction, including provisions for fair hearings; (11) annually prepare and submit a Self-Assessment Review as well as a Program Improvement Plan to the Chief of the Division of Apprenticeship Standards; (12) ensure training and supervision, both on the job and in related instruction, in first aid, safe working practices and the recognition of occupational health and safety hazards; (13) ensure training in the recognition of illegal discrimination and sexual harassment; (14) establish an adequate mechanism to be used for the rotation of the apprentice from work process to work process to assure the apprentice of complete training in the apprenticeable occupation including mobility between employers when essential to provide exposure and training in various work processes in the apprenticeable occupation; (15) establish an adequate mechanism that will be used to provide apprentices with reasonably continuous employment in the event of a lay-off or the inability of one employer to provide training in all work processes as outlined in the standards; (16) have a Local Education Agency (L.E.A.) provide a letter approving the Related and Supplemental Instruction pursuant to LC 3074 [see Attachment A]; (17) grant apprentices credit for previous experience; (18) apprenticeship programs with more than one employer or an association of employers shall include provisions sufficient to ensure meaningful representation of the interests of apprentices in the management of the program; (19) adopt changes to these standards, as necessary, subject to the approval of the parties hereto and the Chief of the Division of Apprenticeship Standards.

Article V Apprentice Agreements – CA LC § 3077, 3077.5, 3078, 3079, 3086; CCR §205, 206, 207

To obtain approval in the State of California, the program sponsor shall register Apprentices, by electronic or other means, to the Division of Apprenticeship Standards within 30 days of execution of the Apprentice Agreement [California Apprenticeship Agreement (DAS-1), see attachment C] in addition to having already been registered for federal purposes by the U.S. Department of Labor, Office of Apprenticeship. These standards, and the U.S. Department of Labor standards, shall be a part of the apprenticeship agreement. Apprentices shall be furnished a copy of the standards or given an opportunity to read them before registration.

An apprentice is a person at least 18 years of age, who has met the requirements for selection under the selection procedures of participating employer, who is engaged in learning a designated craft or trade and who has entered into a written apprentice agreement under the provisions of these standards. If the apprentice is under 18 years of age, the agreement must be signed by the apprentice's parent or guardian. When the period of training extends beyond 18, the apprentice agreement shall likewise be binding to such a period as may be covered. A program sponsor shall not provide a maximum age for apprentices.

Each apprentice agreement shall conform to the State law governing apprentice agreements, and shall be signed by the employer, by the program sponsor, and by the apprentice and must be approved by the apprenticeship committee. Each apprentice shall be furnished a copy of or be given an opportunity to study these standards before registration. These standards shall be considered a part of the apprentice agreement as though expressly written therein.

During the probationary period, an apprentice agreement shall be terminated by the apprenticeship committee at the request in writing of either party. After such probationary period, an apprentice agreement may be terminated by the Administrator by mutual agreement of all the parties thereto or cancelled by the Administrator for good and sufficient reason.

If an employer is unable to fulfill his/her obligations to train under any apprentice agreement or in the event of a layoff, the apprenticeship committee may, with the approval of the Administrator, transfer such agreement to any other signatory employer if the apprentice consents, and such other employer agrees to assume the obligation of said apprentice agreement.

Article VI Hours and Working Conditions – CA LC §3078 (k); CCR §208 (a, d), 209, 210, 212

Apprentices shall work under and with competent professional workers and/or instructors and shall be assigned to work and learning tasks so that they obtain the diversified training on-the-job provided for in the apprenticeship standards.

The workday and workweek and all other conditions of employment for apprentices shall conform to all applicable laws and regulations and shall not be greater than for those of a professional worker.

Overtime shall not be allowed if it will interfere with or impair the training or be detrimental to the health and safety of the apprentice.

There shall be no liability on the part of the employer for an injury sustained by an apprentice engaged in schoolwork at a time when the employment of the apprentice has been temporarily or permanently terminated.

Article VII Wages and Wage Progression – CA LC §3076, 3078 (f); CCR §208 (a, d), 212 (a, 5)

The wages shall be a progressively increasing wage, employee benefits and other compensation as set by Section CCR §208 and CA LC §3078 (f).

In no case shall an Apprentice receive a starting wage that is less than the applicable federal, state or local entity (city or county) minimum wage, whichever is higher for the county or city where the apprentice is working. The applicable minimum wage law shall establish the effective date of the minimum wage.

Where wages/wage schedules differ from or require clarification of, the attached U.S. Department of Labor Office of Apprenticeship standards, the following wage schedule applies:

To advance from one period to the next, the apprentice shall have met the following requirements:

1st period	0% Competencies Demonstrated	\$ 23.00 /hour
2nd period	50% Competencies Demonstrated	\$ 24.00 /hour
3rd period	100% Competencies Demonstrated	\$ 25.00 /hour

Time spent in related and supplemental instruction may not be compensated.

Article VIII Responsibilities of Apprentices – CCR §205, § 206, 207, 212

Each apprentice, having entered into an apprenticeship agreement, shall satisfactorily perform all work and learning assignments both on the job and in related instruction and shall comply with the standards, rules, regulations and decisions of the apprenticeship committee.

Article IX Certificate of Completion - CCR §205, 212, 224

A "Certificate of Completion of Apprenticeship", attesting to the completion of an apprenticeship, will be issued under the authority of the Division of Apprenticeship Standards upon receipt of such competent evidence as may be required.

Article X Controversies – CA LC §3078 (h), 3081; CCR §201

All controversies or differences concerning apprentice agreements, that cannot be adjusted locally by the apprenticeship committee or otherwise, shall be submitted to the Administrator

Article XI Written Applications

Applications can be obtained by visiting the Enableness website at: <https://www.enableness.com/careers>, selecting the appropriate role, and submitting an application by following the provided directions.

Article XII Records

All records will be maintained, in written or electronic form, for five years and kept at:

Enableness USA Components, Inc.
2933 Bayview Drive
Fremont, CA, 94538

Article XIII Modification of Standards - CA LC § 3073, 3075, 3078, 3078.5; CCR §205, 212 (b,13)

These standards shall be modified to conform to any changes in prevailing practices, conditions and wages in the area and the industry when such changes occur. Requests of the program sponsor for modification are subject to the approval of the Administrator of Apprenticeship.

Article XIV Collective Bargaining Agreements - CA LC 3086

Where applicable, if the employer(s) has a collective bargaining agreement with a labor organization applicable to these occupation(s), approval by the labor organization will be affixed to the Employer Agreement (DAS-752).

Nothing hereunder, nor in any approved apprentice agreement, shall operate to invalidate any apprenticeship provision in any collective bargaining agreement between employers and employees setting up higher apprenticeship standards.

Enablence USA Components, Inc. agrees to accept electronic signatures for these Division of Apprenticeship Standards and all related Division of Apprenticeship Standards documents.

The foregoing standards are hereby agreed to and adopted by Enablence USA Components, Inc. on August 29, 2023. (Committee approval date).

Employer Organization

Enablence USA Components, Inc.
2933 Bayview Drive, Fremont, CA 94538

Amy Ma

Date

The foregoing apprenticeship standards, being in conformity with the applicable California Labor Code, California Code of Regulations and Federal Regulations, are hereby approved

(DAS approval date)

Eric Rood, Chief
Division of Apprenticeship Standards

Date

Appendix A
WORK PROCESS SCHEDULE
AND
RELATED INSTRUCTION OUTLINE



Appendix A

WORK PROCESS SCHEDULE

Industrial Manufacturing Technician

O*NET-SOC CODE: 17-3026.00 RAPIDS CODE: 2031CB

This schedule is attached to and a part of these Standards for the above identified occupation.

1. APPRENTICESHIP APPROACH

Competency-Based

2. TERM OF APPRENTICESHIP

Apprentices will receive training in the work experience as listed below. The following are the work processes the apprentice will learn and be able to perform on-the-job. The term of the occupation is based on the apprentice's demonstration of the mastery of the competencies as specified and estimated to complete in approximately 1 years.

3. RATIO OF APPRENTICES TO JOURNEYWORKERS

The apprentice to journeyworker ratio is: 1 Apprentice(s) to 1 Journeyworker(s).

4. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the current hourly journeyworker wage rate, which is: \$25.00.

Name: **Industrial Manufacturing Technician**

Period	% of Journeyworker wage	Competencies	Wage (Hourly)	Description
1st	92%	0	\$23.00	Starting wage
2nd	94%	0	\$23.50	At three month pending performance review
3rd	96%	0	\$24.00	
4th	98%	0	\$24.50	
End Wage	100%	0	\$25.00	



5. PROBATIONARY PERIOD

Every applicant selected for apprenticeship will serve a probationary period of 513 hours .

6. SELECTION PROCEDURES

The selection procedures for this occupation are listed below: 1. The Sponsor will follow standard company procedures for filling an open position from outside the company.

2. Once a list of qualified applicants is received, the sponsor will interview each candidate and forward its recommendations to Human Resources.

3. The Human Resources Manager and the Department Manager will make the final selection based upon the occupational requirements and the needs of the company



Work Process Schedule

Industrial Manufacturing Technician

Job Description: Apply engineering theory and principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff. May perform time and motion studies on worker operations in a variety of industries for purposes such as establishing standard production rates or improving efficiency.

RAPIDS Code: 2031

O*NET-SOC Code: 17-3026.00

Estimated Program Length: 2736 hours

Apprenticeship Type:

☒ Competency-Based

☐ Time-Based

☐ Hybrid

On-the-Job Learning Outline

Competency Check List	Demonstrates Fundamentals: Apprentice can perform the task with some coaching.	Proficient in Task: Apprentice performs task properly and consistently.	Completion Date: Date apprentice completes final demonstration of competency.
	Demonstrates Fundamentals	Proficient in Task	Completion Date/Initials

- Assess product or process usefulness.
- Compile and evaluate statistical data to determine and maintain quality and reliability of products.
- Test products for functionality or quality.
- Test selected products at specified stages in the production process for performance characteristics or adherence to specifications.
- Research human performance or health factors related to engineering or design activities.
- Study time, motion, methods, or speed involved in maintenance, production, or other operations to establish standard production rate or improve efficiency.
- Monitor processes for compliance with standards.



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- Evaluate industrial operations for compliance with permits or regulations related to the generation, storage, treatment, transportation, or disposal of hazardous materials or waste.
 - Read worker logs, product processing sheets, or specification sheets to verify that records adhere to quality assurance specifications.
 - Inspect operational processes.
 - Verify that equipment is being operated and maintained according to quality assurance standards by observing worker performance.
 - Prepare detailed work plans.
 - Aid in planning work assignments in accordance with worker performance, machine capacity, production schedules, or anticipated delays.
 - Develop technical methods or processes.
 - Assist engineers in developing, building, or testing prototypes or new products, processes, or procedures.
 - Develop or implement programs to address problems related to production, materials, safety, or quality.
 - Develop production, inventory, or quality assurance programs.
 - Analyze costs and benefits of proposed designs or projects.
 - Analyze, estimate, or report production costs.
 - Conduct statistical studies to analyze or compare production costs for sustainable and nonsustainable designs.
 - Calibrate scientific or technical equipment.
 - Calibrate or adjust equipment to ensure quality production, using tools such as calipers, micrometers, height gauges, protractors, or ring gauges.
 - Monitor and adjust production processes or equipment for quality and productivity.
 - Design industrial processing systems.
 - Develop manufacturing infrastructure to integrate or deploy new manufacturing processes.
 - Develop sustainable manufacturing technologies to reduce greenhouse gas emissions, minimize raw material use, replace toxic materials with non-toxic materials, replace non-renewable materials with renewable materials, or reduce waste.
 - Select project materials.
 - Select cleaning materials, tools, or equipment.
 - Select material quantities or processing methods needed to achieve efficient production.
 - Create graphical representations of industrial production systems.



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- Prepare layouts, drawings, or sketches of machinery or equipment, such as shop tooling, scale layouts, or new equipment design, using drafting equipment or computer-aided design (CAD) software.
 - Create physical models or prototypes.
 - Assist engineers in developing, building, or testing prototypes or new products, processes, or procedures.
 - Identify opportunities for improvements in quality, cost, or efficiency of automation equipment.
 - Design structures or facilities.
 - Design plant layouts or production facilities.
 - Determine operational methods.
 - Select material quantities or processing methods needed to achieve efficient production.
 - Direct industrial production activities.
 - Oversee or inspect production processes.
 - Direct quality control activities.
 - Oversee equipment start-up, characterization, qualification, or release.
 - Estimate operational costs.
 - Analyze, estimate, or report production costs.
 - Explain engineering drawings, specifications, or other technical information.
 - Create or interpret engineering drawings, schematic diagrams, formulas, or blueprints for management or engineering staff.
 - Implement design or process improvements.
 - Develop or implement programs to address problems related to production, materials, safety, or quality.
 - Monitor activities affecting environmental quality.
 - Adhere to all applicable regulations, policies, and procedures for health, safety, and environmental compliance.
 - Monitor the productivity or efficiency of industrial operations.
 - Monitor and adjust production processes or equipment for quality and productivity.
 - Operate industrial equipment.
 - Set up and operate production equipment in accordance with current good manufacturing practices and standard operating procedures.
 - Prepare drawings or diagrams of products or services.
 - Create or interpret engineering drawings, schematic diagrams, formulas, or blueprints for management or engineering staff.



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- Prepare operational reports.
 - Prepare production documents, such as standard operating procedures, manufacturing batch records, inventory reports, or productivity reports.
 - Purchase materials, equipment, or other resources.
 - Coordinate equipment purchases, installations, or transfers.
 - Recommend technical design or process changes to improve efficiency, quality, or performance.
 - Recommend corrective or preventive actions to assure or improve product quality or reliability.
 - Train personnel on proper operational procedures.
 - Provide advice or training to other technicians.



Provider**Name:** Foothill College**Address:** 12345 El Monte Road**Los Altos Hills, CA 94022****Email:** Allenchris@fhda.edu**Phone Number:** 408.745.8064**Suggested Related Instruction Hours:** 204**Provider****Name:** Enablence**Address:** 2933 Bayview Drive**Fremont, CA, 1510226****Email:** Amy.Ma@enablence.com**Phone Number:** (510) 226-8900**Suggested Related Instruction Hours:** 204

Course Number	Course Title	Learning Objectives	Contact Hours
MATH F040A	QUANTITATIVE REASONING	This course is designed for any student, in any major, who is interested in exploring the connections between math concepts and the quantitative skills we use in everyday life. The course focuses on problem solving using mathematical methods and modeling and quantitative investigation strategies. Applications include linear and exponential models, multivariable relationships, conversions, estimation, elementary probability, and descriptive statistics. Students will learn individually and collaboratively to analyze quantitative information and apply quantitative skills in a variety of real life contexts and express their findings verbally and in writing.	60
ENGR F061A	INTRODUCTION TO SEMICONDUCTOR TECHNOLOGY	This course provides an overview of the semiconductor industry. Focus on clean room safety, wafer processing, and troubleshooting. Students practice scientific thinking and have exposure to running experiments.	84
ENGR F101A	ADVANCED MANUFACTURING	This course provides an understanding of industry technology and exposure to advanced manufacturing, chemical components, electronics, mechatronics, and vacuum technology.	60